Four federal agencies cooperate to cleanup Amchitka Island

by Nancy Harkess

"We've spent two years putting this together and from time to time I must admit it feels like I am pushing a wagon up a hill."

U.S. Department of Energy photo

***Mike Giblin**, NNSA/NV task manager, answers questions at a public meeting in Anchorage, Alaska.*

The wagon **Mike Giblin**, National Nuclear Security Administration's Nevada Operations Office (NNSA/NV) task manager, has been pushing is the historic cleanup of a small island off the coast of Alaska located about 1,340 miles southwest of Anchorage, near the western end of the Aleutian Islands. Amchitka was used primarily as a military base during World War II. The U.S. Air Force operated a weather station at the site in the early 1950s, and the U.S. Navy operated radar facilities on the island for surveillance of the north Pacific from 1986 until 1993.

During the 1960s and 1970s, the Atomic Energy Commission (AEC) detonated three underground nuclear tests on Amchitka. The location was chosen in 1964 when the AEC was looking for a site to conduct tests in support of the Vela Uniform Program. The goal of this program was for the nation to gain the ability to tell the difference between an earthquake or a nuclear detonation in another country.

Four government agencies have joined forces in the push to remediate environmental damage caused by military and AEC activities on the island several decades ago. Those agencies include the NNSA/NV, Navy, Army Corps of Engineers, and the Fish and Wildlife Service.

In early May, the four agencies hosted a meeting in Anchorage to discuss, with the Alaskan public, the project plans for this summer. In spite of wet and snowy weather, 33 individuals attended that meeting. There were also citizens looking for work, environmental activists looking to express their concerns, residents looking for answers, and family members of men who had worked on those original tests so long ago looking for closure.

"We wanted to hear what the citizens of Alaska had to say and answer their

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U.S. Department of Energy photo

A barge carrying three million pounds of equipment and supplies arrives at Amchitka.

SITELINES

Issue 68 May 2001

A PUBLICATION FOR ALL MEMBERS OF THE NNSA/NV FAMILY

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Amchitka Island

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questions," says Giblin. "We saw it as an opportunity for several government agencies to come together and accomplish an important task. After all – we all have the same goal: protecting the public and environment."

One of the things the citizens had to say was that they were concerned for the safety of those workers who would be employed on the summer cleanup. Although the remediation sites are not "rad work sites," and workers will not have to wear protective clothing beyond the standard hard hats and steel-toed boots seen on any construction site, the concern was there.

"Even though we know there is no danger, we understand their fear," says **Runore Wycoff**, NNSA/NV's environmental restoration division director. "As a result of what the public had to say at that meeting, we'll be installing radiation monitoring stations at our work sites and base camp. When they can see for themselves that there are no elevated readings, they will feel more secure."

The four agencies also gave presentations to the Board of Directors of the Aleutian/Pribilof Islands Association (A/PIA), which represents 12 native villages in the Aleutian Islands. NNSA contractor representatives and A/PIA labor representatives worked together to make sure qualified local citizens had an opportunity to find employment on the project.

"We're eager to hire from the local workforce and the A/PIA has been a real asset in making this happen," says Giblin. "To help those who may find it hard to get from their villages to Anchorage, A/PIA plans to bring in its people from those outlying communities so they can meet the transport plane that will take them out to the island."

In addition to the workforce that will take part in the summer of 2001's remediation efforts, the project requires a great deal of logistical support — everything from soup kitchen to nuts and bolts. A barge carrying three million pounds of base camp support equipment and supplies arrived on Amchitka on April 11 and the base camp set up by May 2. NNSA's field equipment is on its way to the island and the Navy workforce is already demolishing buildings. The Army arrives in July.

Scientists carried out extensive environmental studies of the island both before and after the nuclear tests. In recent years, additional studies focusing on surface contamination were conducted. Non-radioactive, organic contaminants, such as petroleum byproducts, that were used in drilling operations have been found in mud pits on the island.

This summer workers will remove the water from 11 mud pits, stabilize the mud, and cover the pits with earth and a liner. This should isolate the drilling mud from the environment and reduce the potential for mud flows into waterways. Other key initiatives include draining and closing in place an underground storage tank previously used to store asphalt for island runway repairs and plugging 24 shallow groundwater monitoring wells.

The Navy will demolish and remove old buildings, fuel tanks, and a sewage lagoon that remain from its earlier radar program operations. Army Corps of Engineers' activities will center around cleaning up World War II sites and analyzing the island for collection and disposal of unexploded ordnances, such as small rockets and hand grenades remaining from the days when the island was the location of a military base.

In addition to ongoing communications with the state of Alaska and compliance with state environmental regulations, the Nevada Operations Office is working closely with the U.S. Fish and Wildlife Service, which manages the island as part of the Alaska Maritime National Wildlife Refuge and also serves as the island landlord, and the A/PIA which has facilitated public involvement in the decision-making aspects of the project.

Discussions are underway between the state of Alaska's Department of Environmental Conservation and NNSA/NV as to future actions regarding long-term surface and subsurface contamination. Although considerable information has already been gathered, there are still questions regarding radioactive materials which remain underground and their potential risk to the ocean and marine life. NNSA/NV has developed a computerized groundwater model designed to predict the flow of these radioactive contaminants. The information from this program will be the basis of a screening risk assessment of the Amchitka marine environment to be shared with the state of Alaska, the U.S. Fish and Wildlife Service, and the A/PIA and incorporated into the development a long-term strategy for future activities on the island.

From May through September, NNSA/NV representatives **Pete Sanders, Bill Willborn, Wycoff**, and **Giblin** will take turns providing a continuous on-site presence on the island. **Steve Mellington**, NNSA/NV's deputy director of environmental management also will visit the island to conduct an Integrated Safety Management assessment. All agencies expect to complete their work by September 15, 2001.

BN recipient of Excellence in Education award

by Kurt Arnold

Bechtel Nevada was awarded Clark County School District's Excellence in Education Hall of Fame award at a special School Board meeting held on April 18. Selected as one of 13 recipients of the award, Bechtel Nevada was recognized for its extraordinary contributions to education in Southern Nevada.

photo courtesy of Clark County School District

Steve Liedle, Bechtel Nevada's president and general manager, accepted the award from Susan C. Brager-Wellman, member of Clark County Board of School Trustees.

The award honored Bechtel Nevada for their work and support of the Clark County School District's JASON Project, FOCUS School program, and PAYBAC Program, as well as a donation of a new remotely operated vehicle. The nomination included the following words: The company is a stable source of support for the Clark County School District. Bechtel has provided human resources in the form of guest speakers and chaperones, physical resources in the form of money and supplies, and the ultimate resource to public education – a partner that goes the distance.

Steve Liedle, Bechtel Nevada's president and general manager, accepted the award from **Susan C. Brager-Wellman**, member of Clark County Board of School Trustees. In addition to the plaque, Bechtel Nevada's name will be permanently engraved in a display in the foyer of the Edward A. Greer Education Center, the Clark County School District's administrative building, located on East Flamingo.

photo by Nancy Tufano

The Clark County School District's Excellence in Education Hall of Fame award given to Bechtel Nevada for its contribution to education in Southern Nevada.

NTS' new Engine-2

by William Botos

The Nevada Test Site Fire Protection & Emergency Medical Services recently retired the old Engine-2, a 1983 Mack Pumper, in order to make room for the newest vehicle in their fire fighting fleet.

The new Engine-2 eclipses the retiring fire engine with room for up to five crew members and generator power for operation of power tools and on-scene lighting. It carries a vast amount of specialty fire fighting and rescue tools, while being able to do the primary task of delivering up to 1,250 gallons of water per minute. Engine-2 is equipped with two types of internal foam drafting systems for extinguishing special fires with foam. Also, a pivoting center-mounted deck gun can be used to deliver large volumes of water at high pressures that are difficult for personnel to manually direct through hose lines.

The Nevada Test Site Fire Protection & Emergency Medical Services reminds everyone its commitment is to always be ready to provide professional fire and emergency medical services.

photo by Philip Gorka

The new Engine-2, joins the fleet of the Nevada Test Site Fire Protection & Emergency Medical Services.

Beyond the call

Sharing the Olympic spirit

by Wendy Cable

Rick Maurer, Bechtel Nevada, principal operations specialist, provided a show and tell on the 2000 Summer Olympic Games to his son's second grade class at Silverbrook Elementary School in Fairfax Station, Va. Maurer shared personal photos of Sydney and the Olympic venues, as well as his collection of Australian and Olympic memorabilia.

Montes elected HIP president

by Kurt Arnold

Fran Montes, a Bechtel Nevada workforce specialist, has been elected president of Hispanics In Politics (HIP). Montes replaced longtime president, Fernando Romero in a recent election.

In her new role, Montes will lead the 400-member group to redraw new Assembly districts to bring together as many Hispanics as possible. With an increasing Hispanic population within the state of Nevada, Montes plans to help support capable Hispanic candidates within those new districts and get them into public offices and hopefully into the Legislature.

Montes and her husband have been involved with HIP for the past 10 years. She served as vice president for the past two years and secretary for three years before that.

photo by Kurt Arnold

Pocurement department receives Freedom Award

by Nancy Tufano

On May 4, Bechtel Nevada's procurement department was presented with the United States Small Business Administration's Freedom Award. Bechtel Nevada received the award in recognition of granting 54 percent of its total procurement dollars to small businesses, not only meeting but exceeding subcontracting goals set forth by the National Nuclear Security Administration, Nevada Operations Office.

Bottom row seated (left to right) **Jeanette Matthews, Larry Damm, Dorothy Christian, Judy McGlothlin, Sharon Nanez**, and **Lori Richinson.**

Back row standing (left to right) **Chuck Schaefer, Ron Butturini, Pat Gill, Emma Fox, Doris Burnett, Gary Morrison, Cathy Carey, Ray Sunday, Audwin Whitmore, Phil Carr, Alta McDowell, Ralph Somers, Dennis Jeffrey, Edwin Martin II**, and **Maine Collins**. Not pictured - **Deborah Kimbrell, Fran Kowalski**, and **Mary Wilkins**.

Reno goes to Washington for the fourth time

by La Tomya Glass

In May, Reno High School, the four-time Nevada Regional Science Bowl title holder, represented the Southern Nevada region in the 11th Annual National Science Bowl in Washington, D.C. Senior team members **Erica Davis, John Fuetsch, Nick Helmreich, Brian Jackson**, and **Monica Sircar** battled wits against 60 high school teams from across the country for the National title. In the end, North Hollywood High School from North Hollywood, California won the competition and a two-week trip to the International Youth Science Forum in London, England this summer.

The U.S. Department of Energy's (DOE) National Science Bowl is a highly publicized academic competition among teams of high school students who answer multiple choice and short answers to questions on scientific topics in astronomy, biology, chemistry, mathematics, physics, earth, computer and general science. The teams consist of five students and a teacher, who serves as an advisor and coach. The competition consists of a round robin format followed by a double elimination final. Questions are submitted by scientists at all of DOE's facilities, as well as from other federal agencies and university consortia.

The Reno team was coached by teachers **Michael Meinert** and **Cathy Retterer**, who won their fourth regional title by defeating high school teams from Arizona, California, Nevada, and Utah. The team received $2,500 for their science and math departments, matching team book bags, a first place trophy, and an all-expense paid trip to the National competition.

News Briefs

Cone Penetrometer selected as runner-up for Pollution Prevention Award

by Kirsten Miller

While looking for a way to evaluate the contamination and migration of soil and groundwater, and at the same time, reduce the potential for worker exposure to hazardous and radioactive materials, the Nevada Operations Office found themselves with an award. Each year, the Department of Energy sponsors the *Pollution Prevention Awards Program* to recognize innovation and excellence in waste prevention and recycling. This year, a Nevada Operations Office nomination, "Advanced Cone Penetrometer Tool Used for Contaminated Waste Dump Characterization at the Nevada Test Site," was selected as a runner-up and was forwarded to the White House as an official entry in the *Closing the Circle* Environmental Awards Program.

The cone penetrometer tool (CPT) was deployed to characterize two contaminated waste dumps in Area 25 of the Nevada Test Site. The tool is attached to a large truck which uses its own weight to push a probe into the ground. A sodium iodide scintillation detector on the end of the probe profiles several locations and provides an accurate three-dimensional view of the underground contaminant distribution. Samples from these areas may then be collected for laboratory analysis. The advanced cone penetrometer tool is also used to perform in-place measurements of gamma radiation, volatile organic compounds, and to identify gamma emitting radionuclides in the waste disposal units.

This technology was chosen for use at the Nevada Test Site because it is less costly than drilling and does not result in contaminated soils being brought to the surface, thereby reducing the risk of exposure to workers. Approximately $250,000 in site characterization, waste packaging, and disposal costs were saved by using the cone penetrometer tool. Other advantages to this technology include that it is very mobile and is unaffected by weather conditions.

In addition to being selected runner-up for a *Pollution Prevention Award*, the CPT technology was also submitted as a candidate for the Office of Science and Technology's Silver Certificate.

For more information on the *Pollution Prevention Awards Program*, contact **Carol Shelton, NNSA/NV (702-295-0286)**. Questions on the advanced cone penetrometer tool should be directed to **Sabine Curtis, NNSA/NV (702-295-0542)**.

A rattling time of year

by Nancy Tufano

It's rattlesnake season in Nevada, and recent sightings at Control Point, on the roads and in the field of the Nevada Test Site (NTS) have many people rattled. Bad puns aside, rattlesnake are not limited to the NTS and are commonly sighted at Red Rock Canyon, Lake Mead, and the lower elevations of Mount Charleston. Although rattlesnakes are usually found at elevations below 6,000 feet, it is not impossible to find them at elevations of 9,000 to 10,000 feet. They prefer to nest in foothill country, near water, brush, rocky outcrops and along trails where they can easily prey on rodents, birds and lizards.

photo by James Barner

A rattlesnake is photographed on the move at Control Point late in April.

Rattlesnakes do not aggressively pursue human prey. Usually, they must feel provoked or threatened to attack a person. If you do find yourself in a place where you may encounter rattlesnakes, take the following precautions:

- Snakes tend to avoid the afternoon heat. During summer months, be extremely cautious in the early morning, early evening, and at night.
- Look before you touch anything or step anywhere.
- Tapping a stick on the ground warns snakes and other creatures of your presence and allows them ample time to escape.

If you are bitten by a rattlesnake, there are things you can do to minimize the severity of the bite and reduce your chances of developing a life-threatening reaction.

• Don't panic, remain calm. Only two deaths from rattlesnake bites have been recorded in Nevada in the last fifty years, so your chances of survival are high. In adults, rattlesnake venom can be absorbed and neutralized by the body.
• Keep the bitten area lower than your heart. This will slow the spread of venom throughout the body.
• If you cannot walk, send someone to contact professional medical help.

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Rattlesnakes common to Southern Nevada

Rattlesnake	Description	Location	Elevation	Venom Level
Sidewinder (*Crotalus cerastes*)	Tan with darker stripes or patches along the length of the body, which grows up to 24"	Sandy areas, near water sources	Up to 3,500 feet	Low
Speckled (*Crotalus mitchelli*)	Gray with patches of brown and orange, may have darker patches on the back, grows up to 52"	Rocky outcrops and foothills	Up to 6,500 feet	Medium
Mojave (*Crotalus scutulatus*)	Green, white and black with a diamond pattern along the back, grows up to 42"	Near water sources and sloping hillsides	Up to 4,500 feet	High

Rattlesnakes

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Unfortunately, there are common misperceptions about treating venomous snake bites that may further endanger the victim.

- Never put ice or any type of cold compress on the wound. Cold keeps the venom concentrated in one area and does not allow the poison to dissipate throughout the body.
- Do not attempt to apply any type of tourniquet or restrictive device near the bite. Thwarting the blood flow keeps your body from naturally flushing out the poison and could result in a serious infection and subsequent amputation of the infected area.
- Do not cut the wound and try to suck out the poison. Enough said.

- Never ingest alcohol or any type of stimulant after being bitten by a venomous snake.

Remember these safety tips and you'll avoid any rattling situations.

photo by J. Barry Lagendorf

A rattlesnake suns itself on an outcrop of rocks at the Nevada Test Site early in May.

MILESTONES

Bechtel Nevada

30 years *Las Vegas* - Dorothy Green, Robert Pritchett, Jr.

25 years *Las Vegas* - Rande Finkley

20 years *Las Vegas* - Patrick Dominguez, James Kannard, Roy Lewis, Rudolf Rehfeld, William Skarda; *Nevada Test Site* - Bruce Charlton, Chloe Day, Samuel Kilpatrick, Michael Perkes, Michael Seevers, John Stanz

15 years *Nevada Test Site* - Albert Carroll, William Foulke, Ralph Musick, Jr., Wilbert Wharton

10 years *Las Vegas* - Robert Diaz, Gregory Shott; *Nevada Test Site* - Russell Owens, Nicholas Simpson, Terrence Sonnenburg

5 years *Las Vegas* - Charles Carpenter, Billy Hopkins; *Nevada Test Site* - Jeffery Cates, Edward Collins, Cherie Dinkfeld, Jared Lange, Joseph Leeming, Teresa Morgan, Kenneth Tankersley; *Livermore Operations* - Candace Cotton

National Nuclear Security Administration Nevada Operations Office

35 years Edward Forness

10 years Douglas Bufis, Sadie Wowianko

Lawrence Livermore National Laboratory

10 years Richard Dalson

Los Alamos National Laboratory

15 years Richard Kovach

IT Group

10 years Adele Young

SCI, WANG

5 years Valerie Mulford-Davison

Wackenhut Services, Inc.

5 years *Las Vegas* - Patricia Baiocchetti

— Compiled by Tamiko Brown

50 Years at the NTS

This article is part of a continuing series of historical articles that focuses on the events, places, and people associated with the 50th anniversary of the Nevada Test Site.

Proud Lady of the Desert

by Derek Scammell

U.S. Department of Energy photo

The XF-90 flies over the Mojave Desert, in this September 1950 photo, that appeared in the National Geographic magazine.

The Nevada Test Site holds many fascinating footnotes from the early days of the nuclear weapons testing. Some stories are well known; others are not so easily deciphered.

For many years, one of the more puzzling relics was the jet aircraft (tail number 6688) that languishes broken in half in Area 11 (Plutonium Valley), on the far eastern border of the Nevada Test Site.

No one remembered her mission or history, except that at one time she rested on Yucca Lake, slated to be sold for scrap. Those plans changed in 1963 when the plane was moved to Area 11 and placed in Project 56 blast craters to simulate a crashed aircraft carrying nuclear weapons, where she continues to be used during radiation monitoring training exercises.

In the early days, **Chuck Neagle**, a former supervisor with Reynolds Electrical and Engineering Inc., Waste Management Department and aviation buff , positively identified the craft as the XF-90, built by Lockheed Aircraft in the late 1940s. However, where the plane came from and why it was at the Nevada Test Site remained a mystery. Then in the summer of 1990, **Robert "Bob" Friedrichs**, then deputy director of the Department of Energy's Nevada Operations Office Environmental Protection Division was identifying items for preservation under the Historic Preservation Act and decided to pursue the history of the broken aircraft.

After extensive sleuthing, the story unfolded. Aircraft 6688 was the sole surviving example of the second aircraft design by the late **Clarence L.(Kelly) Johnson** (see sidebar) of the Lockheed Skunk Works that designed the U-2, SR-71 Blackbird and the F-117A Stealth fighter. Johnson is acknowledged as one of aviation's best aircraft designers, and remains the only two-time winner of the prestigious Collier Trophy, for the "furtherance of aeronautical science."

Today the aircraft still sits exposed to the harsh heat and cold of the desert, a far cry from the

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U.S. Department of Energy photo

The Lockheed XF-90 as it looked after making an emergency landing at Edwards Air Force base. Chuck Yeager guided the pilot.

50 Years at the NTS

Proud Lady of the Desert

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day when it was donated by the U.S. Air Force for use in the Tumbler-Snapper nuclear test series.

In 1946, the U.S. Army Air Force requested several aircraft manufacturers to develop a long-range penetration fighter for use in Pacific operations. On June 20, 1946, the short history of the XF-90 began when Lockheed received a contract for two XP-90 prototypes (XF designations were used after June 1948). The two aircraft were numbered 46-687 and 46-688 and were the second aircraft to be designed at the Skunk Works.

U.S. Department of Energy photo

The front section of 46-688 lies separated from the tail section in Area 11. The damage occurred when the aircraft was exposed to an atmospheric test on May 1, 1952, in Area 7 of the Nevada Test Site.

According to Friedrichs the first design was the XP-80 which later went into full production as the F-80 *Shooting Star,* the first jet fighter to be used by the U.S. Air Force. After designing the P-90, the Skunk Works went on to design the U-2, SR-71 and the F-117A Stealth fighter.

Historically the XF-90 boasts several significant features. It was one of the first to employ an ejection seat. It had a fully-adjustable tail which could increase the swayback of the fin while at the same time decreasing the negative angle incidence on the horizontal stabilizer for high speed flight. It was also the first to use fowler flaps and leading edge flaps to improve airflow over the ailerons.

It was also considered one of the true forerunners in swept-wing fighter design. The design of the wing could withstand combat maneuvers between 14 and 15.2 G's; exceptional even today. It was the first to use wing tip drop tanks on sweptback wings. Most importantly, it was the first jet aircraft built in the United States to employ an afterburner, something that virtually all jet aircraft have today.

The first XF-90, tail number 6687, had her maiden flight on June 30, 1949 , and in April 1950, broke the speed of sound. Prior to that date, only specially-built test aircraft had accomplished this feat; eventually 15 supersonic plunges would be credited to the two XF-90s.

After cessation of the flight test program in September 1950, 46-687 was totally destroyed when it was shipped to the National Advisory Commission Aeronautics Laboratory, Ohio for structural testing. The U.S. Air Force decided to use 46-688 in the Operation Tumbler-Snapper series of nuclear weapons tests in 1952. The aircraft, along with 28 others, was exposed to three atmospheric tests: *Baker,* April 15; *Charlie,* April 22 and *Dog* on May 1, 1952. At the end of the tests the XF-90 was determined to be of only negligible airframe value and was listed as destroyed in official records.

The U.S. Air Force is now in final negotiations to take ownership of the aircraft. Arrangements will then be made to decontaminate the XF-90. It will then be moved to the United States Air Force Museum, Wright-Patterson Air Force Base, Ohio, where it will join 200 other aircraft and missiles in a dioramma depicting its final resting place at the Nevada Test Site.

50 Years at the NTS

Profile in history: Kelly Johnson


photo courtesy of Lockheed Martin

After seeing his first aircraft, a World War I Jenny, Clarence "Kelly" Johnson knew he was destined to design aircraft. He was twelve years old at the time. Johnson pursued his dream at the University of Michigan, where he matriculated with a bachelor of science degree in 1932. After graduating, Johnson attempted to pursue a career in aviation design but soon discovered that his lack of experience prevented him from entering his chosen field. Instead, Johnson went back to school and dedicated himself to completing his master of science degree in aeronautical engineering. While pursuing his master's degree, Johnson obtained several teaching fellowships and supplemented his meager income as a private consultant by conducting tests on racing car, train, and aircraft prototypes in the university's wind tunnel.

After graduating in 1933, Johnson was hired at Lockheed to design tools. His responsibilities at the company soon expanded and Johnson acted as a flight test engineer, stress analyst, aerodynamicist, and weight engineer. By 1938, Johnson had worked his way up to chief research engineer and was instrumental in designing the P-38 aircraft in anticipation of World War II. The P-38 was the first 400 mile per hour aircraft designed in the United States. While at Lockheed, Johnson was instrumental in the design of forty aircraft, including the F-80, the first U.S. production jet; the double-sonic F-104 Starfighter; the high altitude U-2; the YF)-12A, capable of reaching speeds of 2,000 miles per hour; and the F-90, the first aircraft with power controls.

In 1958, Johnson, still with Lockheed, was promoted to the position of vice president for Advanced Development Projects (Skunk Works). By 1969, Johnson was a senior vice president with Lockheed until his retirement in 1975, after which he served Lockheed as a consultant for Skunk Works and served on the board of directors until 1980. In recognition to his longevity of service to the Lockheed Company, the newly developed 500 acre Lockheed Rye Canyon Research Facility was renamed the Kelly Johnson Research and Development Center in 1983. Kelly Johnson died in 1990 at the age of eighty, after a life rich in contributions to the development of past, present, and future aircraft.

The following tests were conducted during the month of May:

Dog - May 1, 1952
Easy - May 7, 1952
Fox - May 25, 1952
Encore - May 8, 1953
Harry - May 19, 1953
Grable - May 25, 1953
Apple-2 - May 5, 1955
Zucchini - May 15, 1955
Boltzmann - May 28, 1957
Paca - May 7, 1962
Arikaree - May 10, 1962
Aardvark - May 12, 1962
Eel - May 19, 1962
White - May 25, 1962
Gundi Prime - May 9, 1963
Double Tracks - May 15, 1963 (conducted on Nellis Air Force Range - NAFR)
Harkee - May 17, 1963
Tejon - May 17, 1963
Stones - May 22, 1963
Clean Slate I - May 25, 1963 (NAFR)
Pleasant - May 29, 1963
Clean Slate II - May 31, 1963 (NAFR)
Driver - May 7, 1964
Backswing - May 14, 1964
Minnow - May 15, 1964
Tee - May 7, 1965
Buteo - May 12, 1965
Scaup - May 14, 1965
Cambric - May 14, 1965
Tweed - May 21, 1965
Traveler - May 4, 1966
Cyclamen - May 5, 1966
Chartreuse - May 6, 1966
Tapestry - May 12, 1966
Piranha - May 13, 1966
Dumont - May 19, 1966
Discus Thrower - May 27, 1966
Mickey - May 10, 1967
Commodore - May 20, 1967
Scotch - May 23, 1967
Knickerbocker - May 26, 1967
Absinthe - May 26, 1967
Hatchet - May 3, 1968
Crock - May 8, 1968
Clarksmobile - May 17, 1968
Adze - May 28, 1968
Purse - May 7, 1969
Aliment - May 15, 1969
Torrido - May 27, 1969
Ipecac-A - May 27, 1969
Ipecac-B - May 27, 1969
Beebalm - May 1, 1970
Hod-A (Green) - May 1, 1970
Hod-B (Red) - May 1, 1970
Hod-C (Blue) - May 1, 1970
Mint Leaf - May 5, 1970
Diamond Dust - May 12, 1970
Cornice-Yellow - May 15, 1970
Cornice-Green - May 15, 1970
Manzanas - May 21, 1970
Morrones - May 21, 1970
Hudson Moon - May 26, 1970
Flask-Green - May 26, 1970
Flask-Yellow - May 26, 1970
Flask-Red - May 26, 1970
Piton-C - May 28, 1970
Piton-A - May 28, 1970
Piton-B - May 28, 1970
Misty North - May 2, 1972
Kara - May 11, 1972
Zinnia - May 17, 1972
Monero - May 19, 1972
Mesita - May 9, 1973
Cabresto - May 24, 1973
Kashan - May 24, 1973
Plomo - May 1, 1974
Jib - May 8, 1974
Grove - May 22, 1974
Fallon - May 23, 1974
Tybo - May 14, 1975
Mighty Epic - May 12, 1976
Rivoli - May 20, 1976
Crewline - May 25, 1977
Transom - May 10, 1978
Freezeout - May 11, 1979
Canfield - May 2, 1980
Flora - May 22, 1980
Aligote - May 29, 1981
Kryddost - May 6, 1982
Bouschet - May 7, 1982
Crowdie - May 5, 1983
Mini Jade - May 26, 1983
Fahada - May 26, 1983
Mundo - May 1, 1984
Orkney - May 2, 1984
Bellow - May 16, 1984
Caprock - May 31, 1984
Towanda - May 2, 1985
Panamint - May 21, 1986
Schellbourne - May 13, 1988
Loredo - May 21, 1988
Palisade-1 - May 15, 1989
Palisade-2 - May 15, 1989
Palisade-3 - May 15, 1989
Tulia - May 26, 1989

Is anyone listening?

by Mitzi Sears

When was the last time you listened to your family or employees - put aside everything else you were doing and really listened? If you cannot recall, then you may be compromising your co- workers' or your family's safety.

You are not alone. Many people do not realize the importance of listening skills. Listening is underrated because it is something that we take for granted. We confuse 'listening' with 'hearing' which is the physical act of receiving sounds. We assume listening is automatic, but it's not.

Listening skills are crucial for our safety at our job site and at home. We deal with safety and health issues that arise and may affect thousands of employees at our work location. At home your issues may affect your entire family. Listening is the first step.

On a typical day, we communicate with subordinates, supervisors, managers and family members in detail about what is involved in each job or task and the possible hazards. Whether you are at home or at work, look and listen to the discussion of all the factors carefully before beginning any work or task assignment.

Diana DiResta, president of DiResta Communications states that there are four levels of listening:

1. **Attending**

Be ready to listen. If someone comes into your office and finds you answering phone calls or shuffling papers on your desk, then you are not focused on listening. If there is a shop floor noise or visual distraction, then you are not listening. If a family member tries to talk to you while you are reading the paper, then you are not listening. You should go to a separate room or corner away from distractions. It is the only way you are going to be able to listen appropriately.

2. **Comprehension**

There are many factors that prevent the comprehension of messages. Two factors may be today's diverse workplaces and even our families. To find out if there is a comprehension problem, conduct your own listening check. Stop often. Ask them, "Can you tell me what you understand about this so that I know that I was clear in my explanation?" Similarly, when you are listening, occasionally repeat back what you thought you heard.

3. **Interpretation and evaluation**

Ask yourself if they are making the 'right' inferences about the information you've given them? Have they jumped to the wrong conclusion? Or if you've been talking to someone else, have you really been listening and making the 'right' inferences from the discussion?

4. **Retention**

Can everyone retain what you have been telling them about safety, especially as time goes by? Do you need to create aids such as making a flow chart or producing instructions to help them remember?

Good listening involves more than listening skills. We need to be sensitive to what our family and workers are thinking. Are they worried about changes within the organization or family? Do they feel at risk? If you really listen to what is going on, you may find out and be able to assist with their issues and take part in their celebrations.

Lessons Learned

Exceeding the limits

by Dawn Starrett

Employees need to be aware of the normal use limits or useful life expectancy of equipment and any potential failures that can result from using equipment beyond its stated limits or expected useful life.

photo by Nancy Tufano

Office chairs (above), the type with the tension knob under the rear of the seat (left) for adjusting back tension, are removed from service.

Several office chairs, the type with the tension knob under the rear of the seat for adjusting back tension (United, unspecific model number), recently experienced structural failure. The cap covering the tension spring broke causing the tension spring, two washers, and the cap to shoot clear of the chair. In one instance, the spring from the chair left an impression in the wall. All of these types of chairs have since been removed from service and are being stored pending an investigation of the cause of the structural failure.

photo by Kurt Arnold

The particular design of the chair causes the back of the chair to automatically tilt to the rear when pressure is applied. Back resistance to tilt can be adjusted by tightening or loosening the tension knob under the rear of the seat. The tension spring and cap have stored mechanical energy that when released have the potential to cause damage to anyone or anything in their way until they come to rest.

The owner instruction sheet indicated that normal use contemplates a typical eight to nine hour day, five-day-work-week utilization. Structural failure of any part of the product is a factor of the time of usage and the stress to which the product is subjected. The use of this product for periods of time in excess of "normal" may cause structural failures. Likewise, the use of the product by very large individuals (over 250 pounds in weight) can and frequently does accelerate wear and cause earlier structural failure of the product or its components.

Frequent maintenance and inspection for early evidence of wear or failures must be undertaken with these types of equipment, as well as review of the equipment limitations at the time of purchase to ensure that subsequent equipment use does not exceed its limits. Chairs of this design, over 10 years old, should be removed from service as they are likely to experience structural failure. If repair is the course of action, the entire backrest should be replaced. Replacement options should consider a chair with the adjustment knob under the seat toward the front that points down, not at the angle on the damaged chairs.

If you have a lessons learned to share or if you have benefitted from using a lessons learned that was shared with you, contact **Dawn Starrett**, site lessons learned coordinator **(702-295-4297)**.

In the June issue of SiteLines...

* Trying to keep cool for less
* Historical ground monitoring data released to UNR
* NTS ISM Day

Contractors receive Awards of Excellence

by Kurt Arnold

In a ceremony held on May 3, contractors to the National Nuclear Security Administration's Nevada Operations Office (NNSA/NV) were presented 1999 Awards of Excellence. This prestigious award is presented to contractors who make significant contributions to the Nevada Operations Office's nuclear weapons program. The awards recognized employees, past and present, who made individual contributions or were members of a particular team.

Employees who received 1999 individual awards included:

Bechtel Nevada **Dale Holmberg**

Those receiving 1999 team awards were:

Bechtel Nevada's Nevada Test Site Radiography Project **Steven Becker, Kathleen Breeding, Darryl Droemer, Eugene Hunt, Lyle Jensen, Joseph Kneidel, Marty Manke, Michael O'Keeffe, Eugene Ormond** and **Lawrence Woo**

Bechtel Nevada's Advanced Radiographic Machine Project **Craig Brooksby, Terence Brown, Robert Buckles, Lorraine Capitanelli, Brent Davis, Ronald Head, Matthew Heino, James Pigg, Robert Ritenour, Robert Saethre, William Skarda, Boris Yen, John Yuhas, Jr.,** and **Lee Ziegler**

Bechtel Nevada's Subcritical Experiment Livermore Support Diagnostic Team **Michelle Ashworth, Michael Bridenburg, Martin Burk, Michael Clark, Stephen Coleman, Edward Daykin, Michael Doman, Mitch Downey, Raymond, Eichholz, Chris Evans, Randy Flurer, Bill Fritz, Richard Goble, Helen Hall, William Hankins, Dale Holmberg, Arlin Houser, Kenneth Konops, Robert Kost, William Kost, Gary Lehmann, Edward McCrea, Terence O'Connor, Paul Parker, Michael Pelan, John Pelles, Gregory Perryman, Danial Phillips, Jennifer Politano, Roger Pratt, Jr., Margaret Reinhardt, Roger Rocha, Randy Rohde, William Skarda, Gerald Sparks, Evelyn Strong, Ronald Swegle, Coy Thomas, Frey Tibbits, Herman Utiger, Paul Wargo,** and **Donald Western**

Bechtel Nevada's Nova/NIF Experiments Project Operations Team **Jon Aguilar, Chris Cabacungan, John Duncan, Archie Greenwood, Matthew Griffin, Tory James, Kevin Loughman, Gary Morris, Steve Ranse**, and **Terry Richardson**

Bechtel Nevada and Sandia National Laboratory Subcritical Experiment and Z Experiment VISAR Team **Dennis Barker, Edgar March**, and **Gregory Mize**

Bechtel Nevada's Los Alamos National Laboratory Support Fiber Optic Group **Kizzie Balkus, Barbara Begley, Mandy Blanchard, Paul Breeding, William Egan, Anselmo Garza, Scott Myers, Richard Schiltz**, and **Karen Theuer**

Bechtel Nevada's Proton Ring Magnet Project **Robert Augdahl, Alan Marchand, Kenneth Partain, Latrelle Smith, Lee Stevens**, and **Richard Waters**

Bechtel Nevada's Year 2000 Program Team **Michael Adkins, David Belangia, Denise Blanchard, David Caputo, Jay Chotirmal, Rose Denton, David Dinse, Susan Dokuzoguz, Delia Gomez, Jeffrey Halliday, Anita Hirschy, Donald Kuhl, Terri Marotta, Dorothy McGee, Elaine Mew, Michelle Nicoll, Larry Reynolds, Mildred Sears, Alice Shillock, Jacquelynn Smith, Bonnie Spencer, Mark Ussery, Bradley Van Cleave, Gloria Walsh, Thomas Waltman**, and **Fred Williams**

Bechtel Nevada's Los Alamos National Laboratory Control Room Upgrade Team **Timothy Campbell, David Lancaster, Larry McKiernan, Christopher Moore, Richard Robinson, Edmond Shivers**, and **Dell Spencer**

Bechtel Nevada's Underground Testing Resumption Planning Project **Donald Baltz, Steven Goldstein, Marijo Higginbotham, Richard Ivy, John Kamel, Raymond Nichols**, and **Frederick Walden**

WSI's Electronic System Section **Adrienne Anderton, Bradley Anderton, Lee Borgeson, Robert Davis, Mario Fuentes, Gary Glazier, Earl Hall, Donald Horn, Ronald Johnson, Larry Roeder, Kathryn Ross, William Shimek, Charles Stronach, Terry Taylor**, and **Albert Valle**

WSI's Information Services Section **Mark Kucera, Glenn Murakami,** and **Arthur Richardson**

WSI's Security Access Control Section **Kimberly Clark, Barbara Doss, Sandra Dyer, Richard Gomez, Patricia Huber, Ivory Hughes, Carrie McClain, Carolyn Ribali, Connie Ripa, Candis Scott, Dianna Williams,** and **Rae Yuhas**

CALENDAR OF EVENTS

May 28
NNSA/NV and contractor offices closed in observance of Memorial Day holiday.

June 5 (9:00 a.m. to 11:00 a.m. and 2:00 p.m. to 4:00 p.m.)
Oleg Danilovich Kalugin, retired Major General of the Soviet KGB Foreign Intelligence, will be a guest speaker. C1 Auditorium, North Las Vegas Facility. Contact **Darlene Holseth, BN (702- 295-7700)**, **Doug Nousen, NNSA/NV (702-295-0783)**, or **Don Temple, YMP (702-295-1685)**.

June 6 (9:00 a.m. to 11:00 a.m.)
Oleg Danilovich Kalugin, retired Major General of the Soviet KGB Foreign Intelligence will be a guest speaker. Conference Room, YMP Building #9, Summerlin. Contact **Darlene Holseth, BN (702-295-7700)**, **Doug Nousen, NNSA/NV (702-295-0783)**, or **Don Temple, YMP (702-295- 1685)**.

June 6 (2:30 p.m. to 4:30 p.m.)
Oleg Danilovich Kalugin, retired Major General of the Soviet KGB Foreign Intelligence, will be a guest speaker. Mercury Cafeteria, Nevada Test Site. Contact **Darlene Holseth, BN (702-295- 7700)**, **Doug Nousen, NNSA/NV (702-295-0783)**, or **Don Temple, YMP (702-295-1685)**.

June 7 (8:00 a.m. to 10:00 a.m.)
Oleg Danilovich Kalugin, retired Major General of the Soviet KGB Foreign Intelligence, will be a guest speaker. Great Basin Room, Nevada Support Facility. Contact **Darlene Halseth, BN (702-295-7700)**, **Doug Nousen, NNSA/NV (702-295-0783)**, or **Don Temple, YMP (702-295-1685)**.

June 7 (2:30 p.m. to 4:30 p.m.)
Oleg Danilovich Kalugin, retired Major General of the Soviet KGB Foreign Intelligence, will be a guest speaker. Remote Sensing Laboratory-Nellis Auditorium, Nellis Air Force Base. Contact **Darlene Holseth, BN (702-295-7700)**, **Doug Nousen, NNSA/NV (702-295-0783)**, or **Don Temple, YMP (702-295-1685)**.

June 14 (11:30 a.m., repeated at 12:15 p.m.)
NNSA/NV's Brown Bag Film Series: "Operation Tumbler: Blast & Thermal Effects" and "Dominic Sunset." Great Basin Room, Nevada Support Facility. Contact **Jeff Gordon, BN (702-295-1628)** or **Michael Brown, RAI (702–295-0552)**.

June 20
NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, HAZMAT Spill Center, Bilby crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702-295-0944)**.

July 4
NNSA/NV and contractors offices closed in observance of Fourth of July holiday.

July 19
NTS Public Tour, open to interested members of the public. CP-1, Sedan Crater, Frenchman Flat, HAZMAT Spill Center, Bilby crater, Area 5 Low-level Radioactive Waste Management Site, Apple II houses. Contact **Brenda Carter, BN (702-295-0944)**.

Declassified Film Showings
For information on declassified film showings at NTS CP-1, contact **Denise Langendorf (702- 295-4015)**. For information on declassified film showings at NTS Yucca Mountain, contact **Rod Rodriguez (702-295-5825)**.

Upcoming conferences and trade shows

June 8-16
Safety 2001 - Advancing the EH&S Profession. Anaheim, CA. Contact **American Society of Safety Engineers (847-699-2929)** Monday through Friday from 6:30 a.m. to 3:00 p.m.

June 12-14
Nineteenth Annual Nevada Test Site Classification Symposium. Nevada Support Facility, North Las Vegas, Nev. Attendees must possess Q-clearance. To register for the symposium or for additional information, contact **Patricia Bodin, NNSA/NV (702-295-0611)** or **Donald Wright, BN (702-295-0412)**.

June 20-22
Second Annual Small Business Conference. Aladdin Resort and Casino, Las Vegas, Nev. For additional information, visit www.bechtelnevada/SBAconf/Index.htm.

Partnering for Education

This new feature will highlight the programs and activities of the U.S. Department of Energy Nevada Operations Office and Bechtel Nevada's partnership with the Clark County School District's Focus School Program.

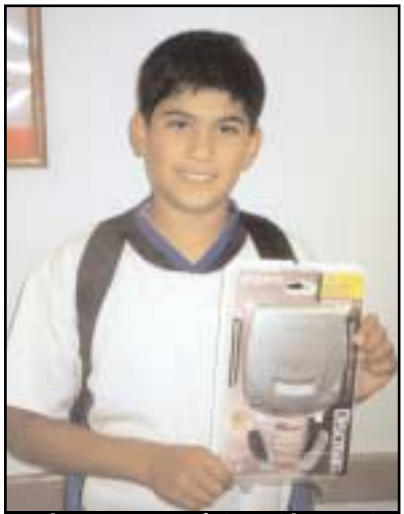

photo courtesy of Jim Bridger Junior High School

***James Ardoian**, a six grade student at Jim Bridger Middle School, poses with the Sony Discman he won for being the April winner of the accelerated reading program.*

Teacher - You're the Greatest!!

May 7-11 was Teacher Appreciation Week in the Clark County School District. On May 11 and May 17, BN staff members showed their appreciation for Jim Bridger Junior High and Kit Carson Elementary by presenting the teachers and staff with a note of appreciation and a lunch bag with the Bechtel Nevada logo and the words "Teachers Nourish Minds."

Kit Carson Students Go Shopping

The students at Kit Carson get to go shopping at their own "store." Some of the supplies that were donated last fall by Bechtel Nevada employees have been placed in the "store" with points assigned to each item. The students are awarded points for specific activities that they complete, i.e., reading, helping, etc. They can accumulate the points to "buy" items in the "store." Linda Gipson, Principal, said that the students soon realized that the more points they earn, the more "buying" power they had.

SITELINES

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Kathleen A. Carlson, Manager, NNSA, Nevada Operations Office.
Darwin J. Morgan, Director, Office of Public Affairs and Information.
Submit articles or ideas to the editor at 702-295-5792 or M/S NLV 106.

Editor
Kurt Arnold
Bechtel Nevada

Layout and design:
Nancy Tufano
Bechtel Nevada

Contributors:

Kurt Arnold
James Barner
William Botos
Michael Brown
Tamiko Brown
Wendy Cable
La Tomya Glass
Nancy Harkess
J. Barry Lagendorf
Kirsten Miller
Cheryl Oar
Derek Scammell
Mitzi Sears
Dawn Starrett
Nancy Tufano